No. 9300021

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Delta & Pine Land Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'DP 3818'

AMENDED CERTIFICATE
*Original grant February 28, 1995

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this 28th day of April in the year of our Lord one thousand nine hundred and ninety-five.

Attest:

Kenneth A. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Dan Glickman
Secretary of Agriculture

FORM APPROVED: OMB 0581-0055, Expires 1/31/91

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*
DELTA AND PINE LAND COMPANY

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.
DPX 3818

3. VARIETY NAME
DP 3818

4. ADDRESS *(street and no. or R.F.D. no., city, state, and ZIP)*
100 Main Street
Scott, Mississippi 38772

5. PHONE *(Include area code)*
(601) 742-3351

FOR OFFICIAL USE ONLY

PVPO NUMBER
9300021

FILING
Date: Nov. 12, 1992
Time: 2:55 ☐ A.M. ☑ P.M.

FEES RECEIVED
Filing and Examination Fee: $ 2150.00
Date: Nov. 12, 1992
Certificate Fee: $ 250.00
Date: Feb. 9, 1995

6. GENUS AND SPECIES NAME
Glycine max

7. FAMILY NAME *(Botanical)*
Leguminosae

8. CROP KIND NAME *(Common Name)*
Soybean

9. DATE OF DETERMINATION
1986

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*
Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
Delaware

12. DATE OF INCORPORATION

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
Harry B. Collins
Delta and Pine Land Company
P.O. Box 157
Scott, MS 38772

PHONE *(Include area code)*:

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow INSTRUCTIONS on reverse)*

a. ☒ Exhibit A, Origin and Breeding History of the Variety.
b. ☒ Exhibit B, Novelty Statement.
c. ☒ Exhibit C, Objective Description of Variety.
d. ☒ Exhibit D, Additional Description of Variety.
e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.
f. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office _____
g. ☒ Filing and Examination Fee ($2,150) made payable to "Treasurer of the United States."

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See section 83(a) of the Plant Variety Protection Act.)*
☐ YES *(If "YES," answer items 16 and 17 below)* ☒ NO *(If "NO," skip to item 18 below)*

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
☐ YES *(If "YES," through* ☐ Plant Variety Protection Act ☐ Patent Act. Give date: _____ .)
☒ NO

19 HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☒ YES (If "YES," give names of countries and dates) USA / January - June, 1992
☐ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in section 41, and is entitled to protection under the provisions of section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT *(Owner(s))*	CAPACITY OR TITLE	DATE
J. Grover Shannon	Midsouth Soybean Breeder	11-9-92
SIGNATURE OF APPLICANT *(Owner(s))*	CAPACITY OR TITLE	DATE
Harry B Collins	Vice President Director of Research	11-9-92

EXHIBIT A

DELTA AND PINE LAND COMPANY'S APPLICATION FOR DP 3818

ORIGIN AND BREEDING HISTORY

1980-	Original cross made 80053 - Bedford * Bragg
1981-	F_1 grown in field Scott, MS
1982-	F_2 grown in field Scott, MS
1983-	F_3 grown in F_3 plant rows. Selected 7 plants.
1984-	F_4 grown in plant rows in cyst field.
1985-	F_5 grown in cyst plant rows.
1986-	F_6 grown in plant rows and number 2680 assigned to line. 2680 determined to be stable and breeding true for characteristics described in exhibit C of this application. At this time no variants are known or have been observed.
1987-	Grown in preliminary yield tests.
1988-91	Grown in advanced yield tests as key #2327. Increase begun in 1989. Off-type plants were removed from seed stocks.
1991-92	Entered into State yield tests as DPX 3818. Seed increased to 4,000 units.
1992-	Released as DP 3818.

EXHIBIT B
Delta and Pine Land Company's Application for DP 3818

Novelty Statement

DP 3818 is most similar to the variety Braxton or Bragg. Differences include but are not restricted to the following:

1) DP 3818 is resistant to race 3 and moderately reistant to race 14 of soybean cyst nematode whereas Bragg and Braxton are susceptible

2) DP 3818 has white flowers whereas Braxton has purple flowers

FORM APPROVED: OMB NO. 0581-0056

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Soybean)

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (Glycine max L.*)*

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
DELTA AND PINE LAND COMPANY	DPX 3818	DP 3818

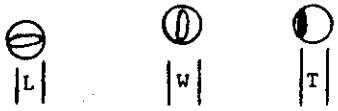
ADDRESS *(Street and No., or R.F.D. No., City, State, and Zip Code)*
100 Main Street
Scott, Mississippi 38772

FOR OFFICIAL USE ONLY
PVPO NUMBER
9300021

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g., [0][9]). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

1. SEED SHAPE:

[2]



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)
2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

★ **2. SEED COAT COLOR: (Mature Seed)**

[1] 1 = Yellow 2 = Green 3 = Brown 4 = Black 5 = Other *(Specify)* _____

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

[2] 1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy'; 'Gasoy 17')

★ **4. SEED SIZE: (Mature Seed)**

[1][3] Grams per 100 seeds

★ **5. HILUM COLOR: (Mature Seed)**

[6] 1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 = Imperfect Black 6 = Black 7 = Other *(Specify)* _____

★ **6. COTYLEDON COLOR: (Mature Seed)**

[1] 1 = Yellow 2 = Green

★ **7. SEED PROTEIN PEROXIDASE ACTIVITY:**

[2] 1 = Low 2 = High

★ **8. SEED PROTEIN ELECTROPHORETIC BAND:**

[ ] 1 = Type A ($SP1^a$) 2 = Type B ($SP1^b$)

★ **9. HYPOCOTYL COLOR:**

[2] 1 = Green only ('Evans'; 'Davis') 2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')
3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')
4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

★ **10. LEAFLET SHAPE:**

[3] 1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other *(Specify)* _____

11. LEAFLET SIZE:

[2] 1 = Small ('Amsoy 71'; 'A5312') 2 = Medium ('Corsoy 79'; 'Gasoy 17') 3 = Large ('Crawford'; 'Tracy')

12. LEAF COLOR:

[2] 1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton') 3 = Dark Green ('Gnome'; 'Tracy')

★ **13. FLOWER COLOR:**

[1] 1 = White 2 = Purple 3 = White with purple throat

★ **14. POD COLOR:**

[1] 1 = Tan 2 = Brown 3 = Black

★ **15. PLANT PUBESCENCE COLOR:**

[2] 1 = Gray 2 = Brown (Tawny)

16. PLANT TYPES:

[2] 1 = Slender ('Essex'; 'Amsoy 71') 2 = Intermediate ('Amcor'; 'Braxton') 3 = Bushy ('Gnome'; 'Govan')

★ **17. PLANT HABIT:**

[1] 1 = Determinate ('Gnome'; 'Braxton') 2 = Semi-Determinate ('Will') 3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

★ **18. MATURITY GROUP:**

[1][1] 1 = 000 2 = 00 3 = 0 4 = I 5 = II 6 = III 7 = IV 8 = V 9 = VI 10 = VII 11 = VIII 12 = IX 13 = X

★ **19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)**

BACTERIAL DISEASES:

★ [2] Bacterial Pustule *(Xanthomonas phaseoli* var. *sojensis)*

★ [ ] Bacterial Blight *(Pseudomonas glycinea)*

★ [ ] Wildfire *(Pseudomonas tabaci)*

FUNGAL DISEASES:

★ [ ] Brown Spot *(Septoria glycines)*

Frogeye Leaf Spot *(Cercospora sojina)*

★ [ ] Race 1 [ ] Race 2 [ ] Race 3 [ ] Race 4 [ ] Race 5 [ ] Other *(Specify)* _____

[ ] Target Spot *(Corynespora cassiicola)*

[ ] Downy Mildew *(Peronospora trifoliorum* var. *manshurica)*

[ ] Powdery Mildew *(Microsphaera diffusa)*

★ [ ] Brown Stem Rot *(Cephalosporium gregatum)*

[1] Stem Canker *(Diaporthe phaseolorum* var. *caulivora)*

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

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FUNGAL DISEASES: (Continued)

★ [ ] Pod and Stem Blight *(Diaporthe phaseolorum* var; *sojae)*

[ ] Purple Seed Stain *(Cercospora kikuchii)*

[ ] Rhizoctonia Root Rot *(Rhizoctonia solani)*

Phytophthora Rot *(Phytophthora megasperma* var. *sojae)*

★ [1] Race 1 [ ] Race 2 [ ] Race 3 [ ] Race 4 [ ] Race 5 [ ] Race 6 [ ] Race 7

[ ] Race 8 [ ] Race 9 [ ] Other *(Specify)* _____

VIRAL DISEASES:

[ ] Bud Blight (Tobacco Ringspot Virus)

[ ] Yellow Mosaic (Bean Yellow Mosaic Virus)

★ [ ] Cowpea Mosaic (Cowpea Chlorotic Virus)

[ ] Pod Mottle (Bean Pod Mottle Virus)

★ [ ] Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

Soybean Cyst Nematode *(Heterodera glycines)*

★ [ ] Race 1 [ ] Race 2 [2] Race 3 [ ] Race 4 [2] Other *(Specify)* Race 14

[ ] Lance Nematode *(Hoplolaimus Colombus)*

★ [2] Southern Root Knot Nematode *(Meloidogyne incognita)*

★ [ ] Northern Root Knot Nematode *(Meloidogyne Hapla)*

[2] Peanut Root Knot Nematode *(Meloidogyne arenaria)*

[ ] Reniform Nematode *(Rotylenchulus reniformis)*

[ ] OTHER DISEASE NOT ON FORM *(Specify):* _____

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

★ [ ] Iron Chlorosis on Calcareous Soil

[x] Other *(Specify)* Sensitive to High Chloride

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[ ] Mexican Bean Beetle *(Epilachna varivestis)*

[2] Potato Leaf Hopper *(Empoasca fabae)*

[ ] Other *(Specify)* _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	Braxton	Seed Coat Luster	Bedford
Leaf Shape	Braxton	Seed Size	Bragg
Leaf Color	Braxton	Seed Shape	Bragg
Leaf Size	Braxton	Seedling Pigmentation	Bedford

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

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VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/ POD
				CM Width	CM Length	% Protein	% Oil		
DP 3818 Submitted	147	2.7	99			36.7	21.3	14.3	
Braxton Name of Similar Variety	146	2.3	99			39.6	20.8	16.8	

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A_2 in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

EXHIBIT D
Delta and Pine Land Company's Application for DP 3818
Additional Description of Variety

DESCRIPTION OF DPX 3818

DPX 3818 is an Early Group VIII Soybean maturing four days earlier than DP 878 and 1 day later than Braxton. It has very good yield potential with cyst race 3 and 14 resistance and resistance to common and peanut root knot nematode. It is moderately susceptible to stem canker, but shows more resistance than DP 878. DP 3818 plants are moderately tall adn have white flowers, tawny pubescence, and tan pods. Seeds are shiny yellow with black hila. Lodging resistance is similar to DP 878. DP 3818 has averaged 17% more yield than DP 878 in 19 different Delta adn Pine Land tests with better productivity especially in the presence of cyst, root knot, and stem canker.

II. Agronomic Characteristics:

	DPX 3818 (Nominee)	DP 417 (Check)	DP 878 (Check)	Coker 368 (Check)
Maturity	-1	0	+3	0
Plant Height	39	43	40	38
Lodging	2.7	2.8	2.4	2.6
Shattering	Excellent	Excellent	Excellent	Excellent
Seedling Emergence	----	----	----	----
% Protein	36.7	39.9	36.3	38.5
% Oils	21.3	19.9	21.0	21.0
Seeds/lb.	3175	3125	3650	3250

III. Add Yield Data (as Outlined in Instruction Part B) should be included in table on attached pages.

1989-90 YIELD AND AGRONOMIC DATA SUMMARIES

LINE	YIELD	% YIELD	MAT	HGT	LDG
DPX 3818	48.5	117	-1	39	2.7
DP 878	41.5	100	+3	40	2.4
DP 417	44.9	107	0	43	2.8
Coker 368	43.4	105	0	38	2.6
A 7986	45.7	110	+2	38	2.1
# Locations	18	8	12	15	14

1990 YIELD AND AGRONOMIC DATA SUMMARY

LINE	YIELD	% YIELD	MAT	HGT	LDG
DP 3818	48.6	119	-3	37	2.5
DP 878	40.9	100	+2	39	2.2
DP 417	45.8	112	0	42	2.7
Coker 368	42.5	104	0	37	2.6
A 7986	47.5	116	+1	35	1.9
DP 3776	50.7	124	-3	36	1.7
# Locations	9	9	5	6	7

1989 YIELD AND AGRONOMIC DATA SUMMARY

LINE	YIELD	% YIELD	MAT	HGT	LDG
DPX 3818	48.4	115	-1	41	2.9
DP 878	42.0	100	+3	40	2.5
DP 417	43.9	105	0	44	2.8
Coker 417	43.2	103	0	39	2.6
A 7986	43.9	105	+2	39	2.3
# Locations	9	9	7	9	7

1988 YIELD AND AGRONOMIC DATA SUMMARY

LINE	YIELD	% YIELD	MAT	HGT	LDG

YIELD SUMMARY

By Region- 1989-90 Yield in BU/A

LINE	MIDSOUTH YIELD	MIDSOUTH % YIELD	SOUTHEAST YIELD	SOUTHEAST % YIELD	MEAN YIELD	MEAN % YIELD
DPX 3818	51.1	116	45.3	119		
DP 878	44.1	100	38.2	100		
DP 417	44.1	100	45.8	120		
Coker 368	40.8	93	45.5	119		
A 7986	47.0	107	44.1	115		
# Locations	10		8			

By States- 1989-90

LINE	AR	MS	LA	NC	SC	GA	MEAN
DPX 3818	52.2	56.4	41.5	50.2	40.1	41.1	
DP 878	45.2	48.5	36.0	43.3	35.4	26.0	
DP 417	44.0	48.4	42.6	49.9	43.1	37.8	
Coker 368	43.8	45.6	30.7	48.8	43.4	38.3	
A 7986	47.5	52.7	37.0	43.6	43.2	48.9	
# Locations	2	5	3	4	3	1	

By Soil Type & Disease Situation-1989-90

LINE	LOAM	CLAY	SCN	Stem Canker	Frogeye	Root Knot Nematode
DPX 3818	46.6	56.0	59.9	46.6	42.5	32.3
DP 878	43.7	46.1	39.5	35.2	41.7	18.5
DP 417	47.5	48.2	37.4	35.8	36.8	25.8
Coker 368	43.8	45.1	53.8	36.8	31.1	45.1
A 7986	48.4	52.1	25.1	42.7	39.1	31.2
# Locations	11	3	1	1	1	1

1988 - 1990 HEAD TO HEAD COMPARISONS

DPX 3818 versus	DP 878	DP 417	Coker 368	A 7986	DP 3776
Total Comparisons	18	18	18	18	9
Won By	7.0 BU	3.6 BU	6.1 BU	2.8 BU	(2.1 BU)
% Wins	83	67	83	67	33%

YIELD BY TEST AND LOCATIONS

1990 075M- YIELD IN BU/A

LINE	Dumas AR	Scott, MS LOAM	Scott, MS CLAY	Lake Prov.	Crowley LA	Kenley NC	Columbia NC	Oswego SC	Arlington GA
DPX 3818	46.6	64.3	58.4	53.2	28.9	38.5	54.0	52.6	48.6
DP 878	35.2	55.1	49.9	40.8	25.5	35.6	48.8	51.5	26.0
DP 417	35.8	51.1	57.6	41.8	32.5	49.2	54.8	51.6	37.8
Coker 368	36.5	54.4	55.3	36.4	24.5	31.7	51.9	53.4	38.3
A 7986	42.7	60.8	56.4	44.5	27.5	37.4	54.3	54.9	48.9
DP 3776	43.1	72.2	59.9	51.4	22.5	47.6	59.6	55.0	44.9
CV%	11.7	4.5	7.0	10.3	18.2	12.2	7.9	9.9	15.4

LINE	MEAN
DPX 3818	48.6
DP 878	40.9
DP 417	45.8
Coker 368	42.5
A 7986	47.5
DP 3776	50.7
CV%	10.0

1989 -075M YIELD IN BU/A

LINE	Dumas AR	Scott, MS LOAM	Scott, MS CLAY	Scott, MS IRRIGATED	Lake Prov.	Fairfax SC	Kenly NC	Columbia NC	Oswego SC
DPX 3818	57.8	53.6	56.4	49.2	42.5	32.3	48.2	59.9	35.5
DP 878	55.2	39.2	47.7	50.6	41.7	18.5	49.4	39.5	36.3
DP 417	52.1	34.6	45.1	53.5	36.8	25.8	57.7	37.4	51.8
Coker 368	51.2	36.0	43.7	38.6	31.1	45.1	57.9	53.8	31.6
A 7986	52.2	39.0	55.4	51.8	39.1	31.2	57.6	25.1	43.4
CV%	7.5	9.0	6.7	13.1	8.4	38.4	8.7	17.1	11.9

LINE	MEAN
DPX 3818	48.4
DP 878	42.0
DP 417	43.9
Coker 368	43.2
A 7986	43.9
CV%	13.1

1988 V750

LINE	Marion AR	Tunica MS	Greenville MS	Lake Prov. LA	V. Platte LA	Wilson NC	Mean

Root-knot Nematode Reaction 1= no galling 5= very severe galling

	M. incognita 1989	M. incognita 1990	M. arenaria 1989	M. arenaria 1990
DPX 3818	2.0	1.8	4.5	2.0
DP 878	---	4.3	5.0	4.5
DP 417	4.0	1.0	5.0	3.5
Coker 368	1.5	1.5	4.0	3.5
A 7986	2.0	4.8	4.0	3.5

Location:
Hattiesburg, MS

Conducted by:
Grady Simpson &
Grover Shannon

Dr. Robert Kinloch, Nematologist
University of Florida, Jay, FL.

Stem Canker Reaction 1= none 5= very severe

	1990
DPX 3818	2.3
DP 878	4.5
DP 417	2.8
Coker 368	3.5
A 7986	1.0

Location:
Scott, MS

//

Conducted by:

Grady Simpson &
Grover Shannon

	Cyst Nematode		Frogeye Leaf Spot
	Race 3	Race 14	
DPX 3818	R	R	2.3
DP 878	S	S	1.0
DP 417	S	S	4.0
Coker 368	R	S	5.0
A 7986	S	S	1.3

Location:

Scott, MS by Grover Shannon
Jackson, TN by Dr. L. Young
Lake Providence, LA
by Grover Shannon

MISCELLANEOUS

Herbicide Tolerance: DPX 3818 shows no obvious sensitivity to Sceptor Sencor, and other herbicides applied at various yield test sites.
Iron Chlorosis: Not a problem where DPX 3818 is adapted.
Seed Stock: 106 Bushels of Foundation Seed
of 3818- grown as DPX 2327

DESCRIPTION AND KEY FEATURES OF DPX 3818

DPX 3818 is an Early Group VIII Soybean maturing four days earlier than DP 878. It has very good yield potential with cyst race 3 and 4 resistance and resistance to common and peanut root knot nematode. It is moderately susceptible to stem canker, but shows more resistance than DP 878. DP 3818 plants are moderately tall and have white flowers, tawny pubescence, and tan pods. Seeds are shiny yellow with black hila. Lodging resistance is similar to DP 878. DP 878 has averaged 17% more yield than DP 878 in 19 different Delta and Pine Land tests with better productivity especially in the presence of cyst, root knot, and stem canker.

KEY FEATURES

1. Early Group VIII- four days earlier than DP 878.
2. Excellent resistance to Race 3 and 4 cyst nematode.
3. Resistant to common and Peanut Root Knot nematode.
4. Less susceptible to stem canker than DP 878.
5. Has shown 17% more yield potential than DP 878.

EXHIBIT E
Delta and Pine Land Company's Application for DP 3818

Statement of Applicant's Ownership

Delta and Pine Land Company owns the variety of DP 3818. The cross was made by Delta and Pine Land company personnel and subsequent selection and testing which led to the decision to release DP 3818 were conducted by personnel of Delta and Pine Land Company.